

Clean Machine

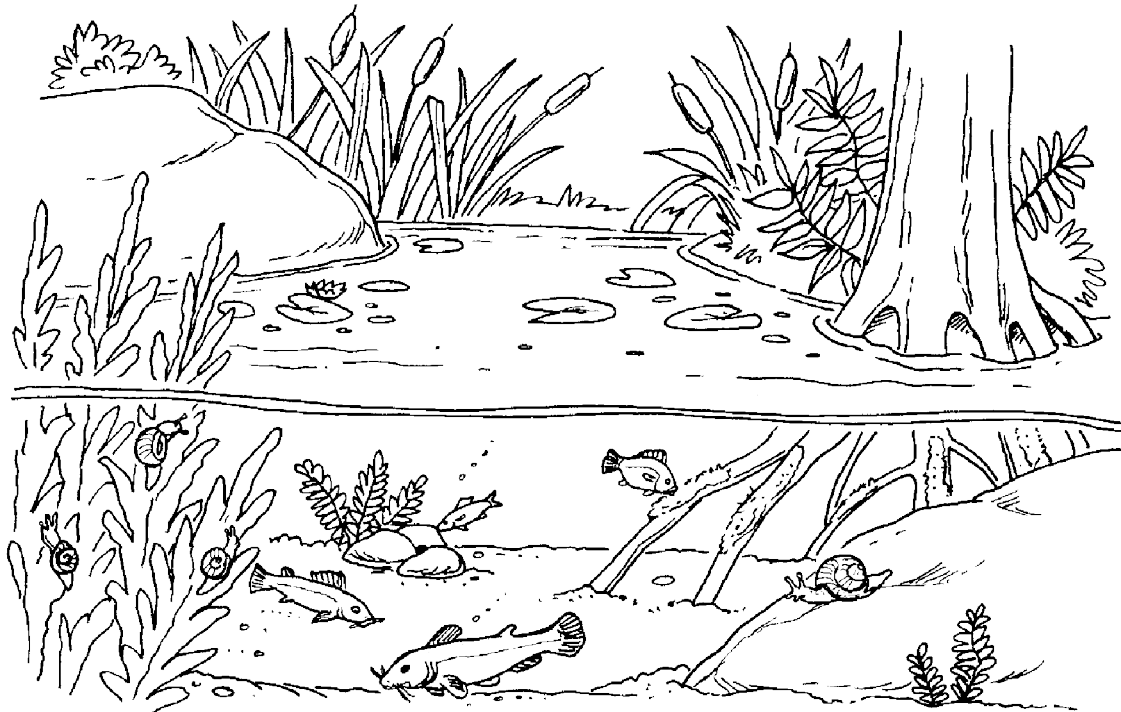
Making the Connection: A new technology using living things is making water clean again.

Nobody likes dirty, smelly water. Or do they? As a matter of fact, a Living Machine thrives on it! What is a Living Machine? It's a water-cleaning machine made of living things. Sound impossible? Well, it takes some explaining.

Some plants, snails, and fish can use the pollutants in water as food. The plants absorb poisonous gases from the water. The fish or snails eat tiny, floating pieces of garbage. The Living Machine is an invention that uses these organisms to clean polluted water.

Here's how the Living Machine works: Dirty water from a factory or town is pumped into a tank. The water next flows through filters that remove bad smells. Then the water flows into an open area containing plants and other living things. These organisms eat most of the pollutants. When the water leaves this area, it looks crystal clear! You wouldn't want to drink it, but you could use it to wash your car. It can be used to irrigate plants. It can be used to clean streets.

The Living Machine provides a food source for many organisms. For humans it takes the hard work out of cleaning dirty water. Don't you wish you had a Living Machine in your back yard?



1. Clean water is important to us. List four things we use it for.

2. Which of these things do you think produces the most dirty water? Rank them from 1 to 5 by putting numbers next to each.

- _____ brushing your teeth _____ flushing the toilet
- _____ factories _____ washing the dishes
- _____ washing clothes

3. What things need regular cleaning in your home? List three of them. Describe how each is cleaned.

4. Is there a lake, river, or pond near you? How clean does it look? Do you think it is polluted? If so, what do you think is causing the pollution?

5. Work with classmates to design your own Clean Machine. Its purpose is to make dirty water clean. You can use living and nonliving things. On a separate sheet of paper, make a diagram of your clean machine and label it. Then describe how it works.